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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
07/699,479	05/13/1991	DAVID L. FOSNAUGH	30226	4049

7590 09/05/2006

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Chicago, IL 60606-6402

EXAMINER

CHOI, STEPHEN

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

07/699,479

Applicant(s)

FOSNAUGH, DAVID L.

Examiner

Stephen Choi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/9/05 & 6/16/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 6-11, 13-31, 47, 48 and 52-87 is/are pending in the application.
- 4a) Of the above claim(s) 14, 15, 17, 25, 27, 29-31, 47, 48, 55 and 58-87 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 6-11, 13, 16, 18-24, 26, 28, 52-54, 56 and 57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 2-4, 6-11, 13, 16, 18-24, 26, 28, 52-54, and 56-57 in the reply filed on June 16, 2006 is acknowledged.

Response to Amendment

2. The affidavit under 37 CFR 1.132 filed September 9, 2005 is insufficient to overcome the rejection of claims based upon Wesstrom as set forth in the last Office action because: It states that the claimed subject matter solved a problem that was long standing in the art. However, there is no showing that others of ordinary skill in the art were working on the problem and if so, for how long. In addition, there is no evidence that if persons skilled in the art who were presumably working on the problem knew of the teachings of the above cited references, they would still be unable to solve the problem. See MPEP § 716.04. It also refers only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716. Furthermore, although evidence shows improvement, the evidence is insufficient to overcome a prima facie case of obviousness since such improvement can either be expected or unexpected. The evidence must show that a significant aspect of the claimed invention would have been unexpected. Moreover, the evidence is insufficient to show the success of the claimed invention based on the applicant's statement regarding the direct copying by General Electric, Emerson, and L. H. Carbide. In view of the foregoing, when all of the evidence

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is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 7-8, 10-11, and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Wesstrom et al. (US 3,388,582).

Regarding claim 7, Wesstrom discloses all the recited elements of the invention including a strip of relatively stiff material (e.g., 46) including a series of consecutive generally planar lamination discs formed along a length thereof (e.g., 76) wherein each of the discs including a center falling substantially on an imaginary center line of the strip (e.g., Figure 6), at least two adjacent discs having a plurality of laterally extending slots therebetween forming at least two narrow deformable bridges including portions that are chevron-shaped (e.g., 72, 74) connecting the adjacent discs.

Regarding claim 56, Wesstrom discloses all the recited elements of the invention including:

a) a die assembly having a longitudinal axis and a series of successive die stations serially disposed along the longitudinal axis, center-to-center spacing along the longitudinal axis between centers of each pair of adjacent die stations being fixed and at least some of the die stations

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including punches for shaping a series of interconnecting discs in an elongate scroll metal strip (e.g., 58, col. 2, lines 64-71);

b) a slot punch (e.g., at 58) for forming a plurality of elongate slots extending in a lateral direction transverse to the longitudinal axis (e.g., col. 2, lines 68-72, Figure 6);

c) straddle pilots (e.g., 60, 112, 114, col. 4, lines 71-73).

Although Wesstrom discloses only stretching of the deformable bridges, the strip of Wesstrom is capable being compressed so as to be deformed.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-4, 6, 9, 18-24, 26, 52-54, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wesstrom in view of Applicant's Admitted Prior Art (hereafter AAPA).

Regarding claims 3, 6, and 19-20, Wesstrom discloses the invention substantially as claimed except for a slot cutting punch for forming a plurality of laterally extending slots for simultaneously forming at least three/four narrow deformable bridges. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form more than two bridges (e.g., at least three or four bridges) depending on the thickness of the workpiece as

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taught by AAPA in order to ensure holding adjacent disc together during forming operations. It is noted that the common knowledge or well-known in the art statement of the previous office action mailed April 7, 2004 has been taken to be admitted prior art because applicant failed to traverse the examiner's assertion. Furthermore, although Wesstrom discloses only stretching of the deformable bridges, it is capable being compressed so as to be deformed. Regarding claim 2, the modified device of Wesstrom fails to disclose a pilot cutting punch and at least one pilot pin. AAPA teaches the use of a pilot cutting punch (e.g., 21) and a pilot pin (e.g., 23) as old and well known in the art for the purpose of properly orienting discs at die stations. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the pilot cutting punch and the pilot pin as taught by AAPA on the modified device of Wesstrom in order to ensure proper alignment of the workpiece for further operations. Regarding claims 4, 21, 23, 54, and 57 the bridges have the shape of a chevron (e.g., Figure 6 of Wesstrom). Regarding claim 18, a plurality of straddle pilots (e.g., 60, 112, 114, col. 4, lines 71-73 of Wesstrom). Regarding claims 52-53, the modified device of Wesstrom fails to disclose an arcuate shape bridge. It would have been to one having ordinary skill in the art at the time the invention was made to employ the bridges in an arcuate shape as taught by AAPA on the modified device of Wesstrom in order to provide alternatively shaped deformable bridges. It is noted that the common knowledge or well-known in the art statement of the previous office action mailed April 7, 2004 has been taken to be admitted prior art because applicant failed to traverse the

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examiner's assertion. Regarding claims 24 and 26, although the modified device of Wesstrom fails to teach a specific thickness of the workpiece and a specific lateral width of the bridges, the modified device of Wesstrom teaches the workpiece having a thickness and a lateral width of each bridge that permits deformation of the bridges. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an optimum lateral width of each bridge (e.g., in the range between substantially .050 inch and .070 inch) for the workpiece having different thickness (e.g., approximately .025 inch) as taught by AAPA on the modified device of Wesstrom in order to achieve the specified function of Wesstrom. It is noted that the common knowledge or well-known in the art statement of the previous office action mailed April 7, 2004 has been taken to be admitted prior art because applicant failed to traverse the examiner's assertion. Regarding claims 9 and 22, Wesstrom fails to disclose die pilots and strip pilots. AAPA teaches the use of die pilots (23) and strip pilots (22) as old and well known in the art for the purpose of properly orienting discs at die stations. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the die pilots and the strip pilots as taught by AAPA on the device of Wesstrom in order to ensure proper alignment of the workpiece for further operations.

7. Claims 13, 16, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent 1652940 (hereafter '940) in view of Wesstrom and AAPA.

'940 discloses the invention substantially a claimed except for a series of shaped laminations discs from an elongate strip to form a series of adjacent discs and a step of engaging outer sides of discs thereby orienting the disc at the slot cutting station while cutting the at least one slot. AAPA teaches the use of elongated strip to form a series of adjacent discs to form laminations. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the device of '940 to process a strip formed by a series of adjacent discs as taught by AAPA in order to form laminations. Wesstrom teach a step of engaging outer sides of discs thereby orienting the disc at the slot cutting station while cutting the at least one slot (e.g., 79, 112, 114 of Wesstrom). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the step of engaging outer sides of discs thereby orienting the disc at the slot cutting station while cutting the at least one slot as taught by Wesstrom on the device of '940 in order to ensure proper alignment of the workpiece for further operations. Regarding claim 28, although the modified process of '940 fails to teach a specific thickness of the workpiece and a specific lateral width of the bridges, the modified process of '940 teaches the workpiece having a thickness and a lateral width of each bridge that permits deformation of the bridges. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an optimum lateral width of each bridge (e.g., in the range between substantially .050 inch and .070 inch) for the workpiece having different thickness (e.g., approximately .025 inch) as taught by AAPA on the modified process of '940 in order to achieve the specified function of '940. It is noted that the common knowledge or well-

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known in the art statement of the previous office action mailed April 7, 2004 has been taken to be admitted prior art because applicant failed to traverse the examiner's assertion.

Response to Arguments

8. Applicant's arguments filed September 9, 2005 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 3, 7, and 56 that Wesstrom fails to disclose generally planar motor lamination discs have been considered but are moot in view applicant's amendment filed June 16, 2006.

Applicant's arguments with respect to claim 3 that Wesstrom fails to disclose at least three narrow deformable bridges have been considered but are moot in view of the new ground(s) of rejection. Regarding applicant's argument with respect to claims 3, 22, and 56 that Wesstrom fails to teach shortening of the deformable bridges, the strip of Wesstrom is capable being compressed to be shortened so as to decrease the distance between the centers.

Applicant's arguments with respect to claim 7 that Wesstrom fails to disclose at least three narrow deformable bridges have been considered but are moot in view of applicant's amendment filed June 16, 2006. Again, the strip of Wesstrom is capable being compressed to be shortened so as to decrease the distance between the centers.

9. Applicant's arguments with respect to claims 13, 16, and 28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

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10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Choi whose telephone number is 571-272-4504. The examiner can normally be reached on Monday-Thursday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



STEPHEN CHOI
PRIMARY EXAMINER

SC
29 August 2006